



October 21, 2014

Kevin Wilhelm
Melcomm
7801 Industrial Dr.
Spring Grove, Illinois 60081

RE: 510-518 N. St. Clair St Thorium Monitoring on 10/20/14

Dear Mr. Wilhelm:

Stan A. Huber Consultants, Inc (SAHCI) was hired by your firm to provide radiation monitoring during installation of a fiber optic line located at 510-518 N. St Clair St. in Chicago, Illinois. The monitoring was performed on October 20, 2014.

Instrumentation

Surface gamma scans were performed by Glenn Huber using a Ludlum Model 2221 Scaled / Ratemeter with attached 2"x2" NaI probe. The instrument was calibrated on October 17, 2014. The USEPA action level of 7.1 picocuries per gram (pCi/g) total thorium for this instrument is 18,309 counts per minute (cpm) unshielded and 6,279 cpm with a 6" collimated lead shield.

The average background count rate for this location was found to be between 2,400 and 2,800 cpm (shielded).

Soil Gamma Scans

Gamma surface scans were performed using the Ludlum Model 2221 Scaler / Ratemeter described above. The detector was equipped with a lead shield due to the planned narrow width of the excavation and elevated background levels from the adjacent brick building. The planned excavation was to be approximately 20 feet in length. Excavation started at the corner of the building but only extended about 3 feet due to elevated thorium levels. See attached Radiation Survey Form.

Shielded count rates of 13,200 cpm were identified directly below the asphalt and paver layers at less than 1 foot in depth. This is above the 7.1 pCi/g threshold value of 6,279 cpm. The asphalt and brick pavers were removed to ensure that the elevated count rates were not due to Naturally Occurring Radioactive Material (NORM) in the bricks. Since the count rates were still elevated after removing the pavers, work was stopped and no soil was handled or removed from the excavation. See attached photographs.


Additional Monitoring

Although count rates were identified above of threshold limit, no excavation was performed and the soils were left undisturbed. Two screening soil samples were collected to determine the approximate thorium concentration. The analysis of these samples showed total thorium levels of 10.97 pCi/g and 10.05 pCi/g. See attached analysis report.

Per your instructions, I contacted Verneta Simon at USEPA after identifying the elevated count rates. We discussed my findings and indicated that we would follow up with a written report. This report should be forwarded to her and any further work planned work at this location should only be done under direction of USEPA.

Thank you for your assistance with this project. If you have any questions or need additional information please call me at (815) 485-6161.

Sincerely,
Stan A. Huber Consultants, Inc.

A handwritten signature in black ink, appearing to read 'Glenn Huber', with a long horizontal flourish extending to the right.

Glenn Huber, CHP
President



Radiation Survey Form

Location/ Project ID: Melcomm: 510 - 518 N. St. Clair St.

Date: 10/20/14

Technician: Glenn Huber

Inst Model: Cudlum 2221

Serial No. : 134542

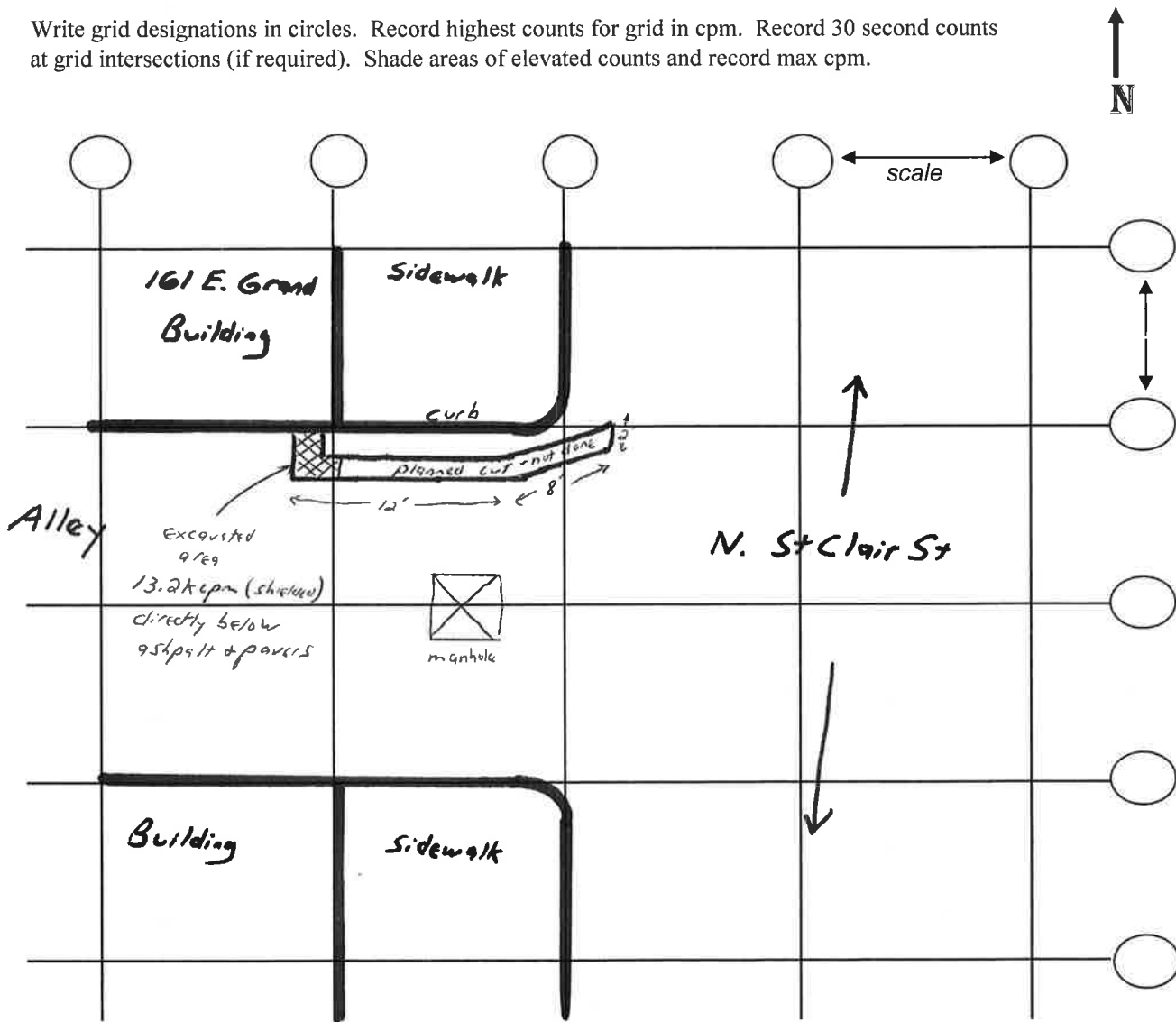
Probe Type: 1"x1" NaI / 2"x2" NaI
Shielded / Not Shielded

Lift Elevation: < 1'

Background 2.4 to 2.8 kcpm

Action Level: 6279 cpm

Write grid designations in circles. Record highest counts for grid in cpm. Record 30 second counts at grid intersections (if required). Shade areas of elevated counts and record max cpm.



Gamma Spec Report - Melcomm 510 - 518 N. St. Clair St.

Stan A. Huber Consultants, Inc.
200 North Cedar Road
New Lenox, IL 60451
(800) 383-0468

Instrument ID:

Canberra Genie 2000 NaI Gamma Spec System
2"x2" NaI detector w/ pulse height analysis software package

Summary Report - Samples Collected October 20, 2014

| Sample ID | Analysis Date | Sample Group | Description | Weight (g) | U-238** Activity | U-238 Uncertainty | Th-232 Activity | Th-232 Uncertainty | Ra-226 Activity | Ra-226 Uncertainty | Total Radium Activity | Total Radium Uncertainty |
|-----------|---------------|----------------|-----------------------|------------|------------------|-------------------|-----------------|--------------------|-----------------|--------------------|-----------------------|--------------------------|
| 4016 | 10/21/2014 | background | bkg102114 | 7.5 | -0.27 | 3.46 | -0.19 | 1.11 | -0.27 | 1.54 | -0.46 | 1.90 |
| 4017 | 10/21/2014 | soil standard | soilstd102114 | 36.9 | -3.38 | 4.95 | 5.18 | 1.57 | 2.01 | 2 | 7.19 | 2.54 |
| 4018 | 10/21/2014 | exclusion zone | S6788 501 St Clair #1 | 38.6 | -3.95 | 5.49 | 9.63 | 1.7 | 1.34 | 2.09 | 10.97 | 2.69 |
| 4019 | 10/21/2014 | exclusion zone | S6789 501 St Clair #2 | 32.3 | -4.86 | 7.52 | 8.61 | 2.38 | 1.44 | 2.98 | 10.05 | 3.81 |

All results are in pCi/gram

** Important Note: System has not been calibrated for U-238 and the analytical results detailed above for U-238 should not be used or considered accurate

Analyzed By:



Date:

October 21, 2014